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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,789	03/12/2004	Dwain L. Kamphuis	KLI01 P-360A	8340

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EXAMINER

HOWELL, DANIEL W

ART UNIT	PAPER NUMBER
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3722

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/799,789	Applicant(s) KAMPHIUS ET AL	
	Examiner Daniel W. Howell	Art Unit 3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 11-13, 15-18 is/are rejected.
- 7) ☒ Claim(s) 8, 10, 14, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3-12-04</u> . | 6) <input type="checkbox"/> Other: ____ |

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 9, 11, 13, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Admitted Prior Art in view of Brooks (3,350,964). Page 2 of the specification acknowledges that it is known that when inserts are placed in cylinder blocks, their top surfaces "must be trimmed flush with a top surface of the cylinder block." Page 2 of the specification also states that it is known in the prior art to trim this top surface with a milling machine. Brooks shows a device for machining counterbore 45 onto which a new sleeve for the cylinder bore will be placed. Note from column 1, lines 17-23, and lines 32-36, that the new sleeves have a flange which will seat on the new counterbore 45. While Brooks discusses machining a counterbore 45 for a flanged sleeve rather than trimming the end of the sleeve itself, the Brooks device is certainly capable of performing a trimming operation on the top surface of the sleeve, as was done in the Admitted Prior Art (APA) by the milling machine. Brooks has a tool holder having plate 12 having a recess 30 which is centered over the bore 41 to be machined and a guide sleeve 14 extending vertically from the plate 12. A machining head/trimming tool 22 having a shaft 15 is fitted in sleeve 14, and a depth stop sleeve 31 is mounted on shaft 15 such that the workpiece may be machined to a desired shape. The plate 12 is placed over head studs 42 and locked in place by sleeves 43 and nuts 42. Brooks discusses properly aligning the drive shaft 15 with the axis of the hole at column 2, lines 43-52, and column 3, lines 18-27. The stop 31 is threadedly connected to the drive shaft 15, such that it may be adjusted to a desired tool

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depth, and set screw 34 is used to lock the depth stop at the desired location. Figure 1 shows the tool being rotated by hand, but column 3, lines 67-68, describe also using a pneumatic wrench, which may also be called a "hand held manually operated drill." Regarding claim 13, since the cutter 25 moves circumferentially, it is impossible for crisscross score lines to be formed. It is considered to have been obvious to have used the device of Brooks to machine the end of a new sleeve which has been placed in the cylinder bore until the sleeve is flush with the block as Brooks is clearly intended to operate in a cylinder bore environment, and it is much less expensive to own and operate than the milling machine of the APA method.

3. Claims 5-7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Admitted Prior Art (APA) in view of Brooks as applied to claim 1 above, and further in view of Gaskin et al (5,988,954). It is noted that Brooks has scallops 29 to aid in viewing the operation, but these scallops also provide space for air to travel. The Brooks device does not explicitly show means to vacuum away the chips. Gaskin et al shows a countersinking cage 12 for guiding a countersink drill 14 to a desired depth. As seen from figure 4, the cage 12 has the typical side recesses for chips to escape (the recesses are shown in phantom lines), and a vacuum mounting portion 50 which covers one of the recesses and uses the other recess as an air intake. It is considered to have been obvious to have placed such a vacuum source as taught by Gaskin et al on the plate of the Brooks device in order to remove the cut chips such that they do not pollute the workpiece or cause the workpiece to get scratched.

4. Claims 3, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Admitted Prior Art in view of Brooks as applied to claim 1 above, and further in view of Egger (2,945,403). The depth stop of Brooks does not have a thrust bearing on the bottom. When this

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depth stop contacts sleeve 14, the frictional drag between the two surfaces may cause the depth stop to be axially displaced on shaft 15. Egger shows a tool having a depth stop and a thrust bearing 14 on the bottom. When the thrust bearing 14 contacts the top of bushing 13 as the desired depth is reached, balls 23 will roll smoothly on the bushing, such that the contact surfaces are not worn and the depth stop will not be accidentally displaced on the tool shaft. It is considered to have been obvious to have provided Brooks with a thrust bearing as shown by Egger in order to reduce friction between the contact surfaces and prevent accidental displacement of the depth stop on the tool.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Admitted Prior Art in view of Brooks as applied to claim 11 above, and further in view of Wanous (3,977,805). While Brooks does state that a pneumatic wrench (which may also be called a hand held drill) may be used to rotate the tool, no particular mention is made of the drive between the two. Figure 5 of Wanous shows a rotary drill bit 66 having a flexible connector 67, 68, attached to electric drill 65, such that the operator need not be excessively concerned about holding the drill coaxial with the drill bit axis. It is considered to have been obvious to have provided Brooks with a flexible connection as taught by Wanous such that the operator need not be overly concerned about keeping the axes of the electric drill and cutting tool coaxial.

6. Claims 8, 10, 14, 19, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning the content of this communication from the examiner should be directed to Daniel Howell, whose telephone number is 571-272-4478. The examiner's office hours are typically about 10 am until 6:30 pm, Monday through Friday. The examiner's supervisor, Andrea Wellington, may be reached at 571-272-4483.

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In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office actions directly into the Group at FAX number 703-872-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Daniel Howell of Art Unit 3722 at the top of your cover sheet.

A handwritten signature in black ink, appearing to read 'Howell', written in a cursive style.

Daniel W. Howell
Primary Examiner
Art Unit 3722